

# BLACK IPA/CDA v8 #116

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **60**
- SRM **28.9**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **21.1 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **16 %/h**
- Boil size **28.4 liter(s)**

## Mash information

- Mash efficiency **82.8 %**
- Liquor-to-grist ratio **3.45 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.8 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **7 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **71.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **7 min** at **77C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **28.4 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield  | EBC  |
|-------|----------------------------------|----------------|--------|------|
| Grain | Mep©Ale                          | 4.2 kg (72.4%) | 82.1 % | 5.5  |
| Grain | Viking - pszeniczny              | 0.4 kg (6.9%)  | 83 %   | 5    |
| Grain | Viking - monachijski II          | 0.5 kg (8.6%)  | 79 %   | 22   |
| Grain | Chateau - Cara gold              | 0.25 kg (4.3%) | 78 %   | 120  |
| Grain | Weyermann - Carafa II Special    | 0.25 kg (4.3%) | 65 %   | 1150 |
| Grain | Fawcett - czekoladowy pszeniczny | 0.2 kg (3.4%)  | 72.7 % | 1000 |

## Hops

| Use for             | Name       | Amount  | Time     | Alpha acid |
|---------------------|------------|---------|----------|------------|
| Boil                | Magnum     | 25.79 g | 60 min   | 11.5 %     |
| Aroma (end of boil) | Columbus   | 30 g    | 10 min   | 15.7 %     |
| Aroma (end of boil) | Simcoe     | 30 g    | 5 min    | 14.5 %     |
| Aroma (end of boil) | Citra      | 20 g    | 5 min    | 13.5 %     |
| Aroma (end of boil) | Cascade US | 50 g    | 1 min    | 7.1 %      |
| Dry Hop             | Simcoe     | 70 g    | 2 day(s) | 14.5 %     |

|         |          |      |          |        |
|---------|----------|------|----------|--------|
| Dry Hop | Citra    | 30 g | 2 day(s) | 13.5 % |
| Dry Hop | Columbus | 20 g | 2 day(s) | 15.7 % |

### Yeasts

| Name                           | Type | Form  | Amount | Laboratory |
|--------------------------------|------|-------|--------|------------|
| WLP090 - San Diego Super Yeast | Ale  | Slant | 180 ml | White Labs |

### Extras

| Type        | Name                  | Amount | Use for  | Time  |
|-------------|-----------------------|--------|----------|-------|
| Water Agent | Gips                  | 3 g    | Mash     | ---   |
| Water Agent | kwas mlekowy 80% [ml] | 3.5 g  | Mash     | ---   |
| Water Agent | chlorek wapnia [ml]   | 0 g    | Mash     | ---   |
| Water Agent | węglan wapnia/kreda   | 7 g    | Mash     | ---   |
| Water Agent | sól epsom             | 1.5 g  | Mash     | ---   |
| Fining      | irish moss            | 4 g    | Boil     | 5 min |
| Water Agent | kwas askorbinowy      | 4 g    | Bottling | ---   |